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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,241	10/31/2001	Yoshiyasu Fujiwara	0388-011839	4541
28289	7590	11/16/2005	EXAMINER	
THE WEBB LAW FIRM, P.C. 700 KOPPERS BUILDING 436 SEVENTH AVENUE PITTSBURGH, PA 15219			JABR, FADEY S	
			ART UNIT	PAPER NUMBER
			3639	

DATE MAILED: 11/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/016,241	FUJIWARA, YOSHIYASU	
	Examiner	Art Unit	
	Fadey S. Jabr	3639	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3/25/02; 7/2/03</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. JP 2000-334535 filed on 1 November 2000.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims **1, 7-9, 12, 14 and 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yonemura et al., U.S. Patent No. 4,788,849 in view of Watson, U.S. Patent No. 6,581,045 B1.

As per **Claim 1, 9, 12, 14 and 16**, Yonemura et al. discloses a method of supporting sales and maintenance of a steam traps, the method utilizes an aggregating system which effects the steps of:

- inputting stored diagnostic result data and model confirmation result data from a diagnostic device which has diagnosed a working condition of each of a plurality of existing steam traps installed in a customer's plant (Col. 2, lines 39-54);
- calculating, based on said diagnostic result data, a first total steam loss amount

Art Unit: 3639

due to malfunction of steam traps, the first total steam loss amount comprising aggregation of steam leak amounts of all the existing steam traps (Col. 2, lines 3-7);

- calculating a monetary conversion value of an integrated value of a sum of the first total steam loss amount and the second total steam loss amount integrated for a predetermined period (Col. 2, lines 55-59);

Yonemura et al. fails to disclose a method of:

- calculating, based on said model confirmation result data, a second total steam loss amount, which comprises aggregation of differences between inherent steam leak amounts of the existing steam traps under their normal working conditions and inherent steam leak amounts of recommended steam traps under their normal working conditions;

- generating comparison data allowing comparison between said monetary converted value and a replacement cost required for lump-sum replacement of all the existing steam traps by the recommended steam traps; and

- outputting said comparison data for presentation to the customer in sales and/or maintenance activities of the recommended steam traps.

However, Watson teaches a method for calculating the current defect value and an anticipated value without the defects; another method for comparing financial data representative of repair/replacement costs; and outputting the above data to a specified user (Col. 4, lines 47-55, 65-67; Col. 5, lines 1-3). Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Yonemura et al. and include calculating values for assets with and without defects along with comparison data representing repair/replacement costs, and finally outputting the data to a specified user as taught by Watson.

Art Unit: 3639

Watson provides motivation by describing an asset management system that allows a user to evaluate the effect of potential repair/replacement activities on the condition of the asset (Col. 4, lines 36-40; Col. 6, lines 42-43).

As per **Claim 7**, Yonemura et al. fails to explicitly disclose a method wherein the system effects the further step of adding, to a contract for lump-sum replacement of the steam traps to be concluded between the customer and a seller of the steam traps, a divided payment contract using a credit loan company.

Official notice is taken that a contract for asset replacement between a customer and a seller includes a divided payment contract using a credit loan company is old and well known. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Yonemura et al. and include the step of adding a divided payment contract using a credit loan company to a contract for lump-sum replacement of the steam traps, because it provides convenience to the user, and it greatly improves the marketing aspects of the system.

As per **Claim 8**, Yonemura et al. fails to disclose a method wherein in the step of diagnosing the working conditions of the existing steam traps for generating the comparison data or in the step of inspecting the steam traps under the maintenance contract concluded, the system effects the further step of inspecting working conditions of auxiliary plant devices other than and relating to the existing or newly installed recommended steam traps. However, Watson teaches when determining defects of an asset to also determine defects of associated parts (Col. 10, lines 52-58). Therefore, it would have been obvious to one of ordinary skill in the art at the time of

Art Unit: 3639

applicant's invention to modify the method of Yonemura et al. and include the step of also inspecting working conditions of auxiliary plant devices as taught by Watson. Watson provides motivation for inspecting working conditions of associated plant assets by mentioning that a defect could exist in the asset due to an associated asset device (Col. 11, lines 28-31).

5. Claims **2, 10, 13, 15, and 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yonemura et al., U.S. Patent No. 4,788,849 in view of Watson, U.S. Patent No. 6,581,045 B1. as applied to claims 1 and 9 above, and further in view of Moore, "Cut Steam-Trap Costs; Identifying the best traps for a given application is the key to slashing maintenance costs", hereinafter referred to as Moore.

As per **Claim 2, 10 and 13**, Yonemura et al. discloses a method wherein,

- in said inputting step, the aggregating system inputs stored diagnostic result data and model confirmation result data from the diagnostic device which has diagnosed a working condition of each of some of the plurality of existing steam traps installed in the customer's plant (Col. 2, lines 39-45); and

- in said step of calculating the first total steam loss amount, the system calculates an estimated value of the first steam loss amount based on the diagnostic result data (Col. 2, lines 3-7); and

- in said step of calculating the monetary conversion value, the system calculates the

Art Unit: 3639

monetary conversion value of an integrated value of a sum of the estimated value of the first total steam loss amount and the estimated value of the second total steam loss amount for the predetermined period. (Col. 2, lines 55-59).

Yonemura, fails to disclose a method wherein calculating an estimated value of the second total steam loss amount is based on said model confirmation result data; and the estimated value of the first and second steam loss amounts are based on a trap number ratio comprising a ratio between the number of said some steam traps diagnosed and the total number of existing steam traps;

However, Watson teaches calculating a second steam loss amount based on said model confirmation result data (Col. 4, lines 47-55). Moore teaches using a ratio, failures/inspections, during inspection of steam traps (Para. 11). Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Yonemura et al. and include the trap number ratio as taught by Moore. Moore provides motivation for using a trap number ratio by mentioning that the ratio is helpful in gauging the efficacy of a given inspection frequency (Para. 11).

As per **Claims 15 and 17**, Yonemura et al. fails to disclose a system wherein the second calculating means calculates the estimated value of the second total steam loss amount for each of a plurality of models of recommended steam traps. However, Watson teaches a method for calculating a second defect value (Col. 4, lines 47-55). Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Yonemura et al. and include a second total steam loss amount for the recommended steam traps

Art Unit: 3639

as taught by Watson. Watson provides motivation by describing an asset management system that allows a user to evaluate the effect of potential repair/replacement activities on the condition of the asset (Col. 4, lines 36-40; Col. 6, lines 42-43).

6. Claims **3-6 and 11** rejected under 35 U.S.C. 103(a) as being unpatentable over Yonemura et al., U.S. Patent No. 4,788,849 in view of Watson, U.S. Patent No. 6,581,045 B1 as applied to claims 1 and 9 above, and further in view of Spira et al., Pub. No. US2002/0161614 A1.

As per **Claim 3**, Yonemura et al. fails to disclose a method, the system effects the further step of adding, to a contract for lump-sum replacement of the steam traps to be concluded between the customer and a seller of the steam traps, a maintenance contract for the seller to act on the customer's behalf for inspection of all of the recommended steam traps newly installed in the plant and renewal of service book of these steam traps associated with the inspection during the predetermined period after the lump-sum replacement of the steam traps. However, Spira et al. teaches a method for providing a contract between a user and a seller, and also providing a service manual based on inspection of the asset (Para. 36, 41 and 50). Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Yonemura et al. and include a contract between the user and seller and to also provide a service manual as taught by Spira et al because having a contract provides organization and control as to how a seller will carry out a certain maintenance project. Spira et al. also provides motivation for a service manual by mentioning that a manual leads to the application of the concepts to a maintenance project at a plant (Para. 41, lines 6-7).

As per **Claim 4**, Yonemura et al. fails to disclose a method wherein the steam trap service book is stored in a database maintained by the seller in such a manner that the service book is accessible from a customer's terminal via communication means. However, Spira et al. teaches providing access via a network connection (Para. 36, 41 and 50). Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Yonemura et al. and include providing the user access to the service manual through a communication means as taught by Spira et al., because it greatly improves the convenience of the system by providing the user with convenience and a system that is user-friendly.

As per **Claim 5**, Yonemura et al. discloses a method wherein the aggregating system effects the further steps of inputting stored diagnostic result data from the diagnostic device which has diagnosed a working condition of each of all the recommended steam traps newly installed in the plant after the lump-sum replacement of the existing steam traps by the recommended steam traps (Col. 2, lines 46-54). Yonemura et al. fails to disclose storing a steam trap service book comprising said inputted diagnostic result data in a database maintained by the seller. However, Spira et al. teaches storing data from a service book in a database as taught by Spira et al., because it greatly improves the convenience of the system by providing the user with convenience and a system that is user-friendly.

As per **Claim 6**, Yonemura et al. fails to disclose a method wherein the system effects the further step of adding, to a contract for lump-sum replacement of the steam traps to be concluded between the customer and a seller of the steam traps, a warranty contract for the seller to warrant

Art Unit: 3639

the newly installed recommended steam traps for the predetermined period after the lump-sum replacement of the existing steam traps. However, Spira et al. teaches providing maintenance and sales agreements with sellers under a contract (Para. 50).

As per **Claim 11**, Yonemura et al. fails to disclose a system further comprising service book producing means for producing a steam trap service book in a predetermined format according to a predetermined procedure, based on the diagnostic result data inputted to the inputting means. However, Spira et al. teaches a system that has a specific format based on specific information (Para. 36, 41 and 50). Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the system of Yonemura et al. and include a service manual that has a predetermined format and based on specific data as taught by Spira et al., because it greatly improves the organization and convenience of the system by providing the user with organized data and a system that is user-friendly.

Conclusion

Examiner's Note: Examiner has cited particular columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that the applicant, in preparing the responses, fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Art Unit: 3639

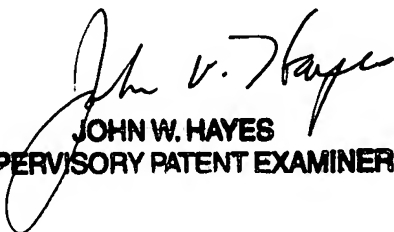
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fadey S. Jabr whose telephone number is (571) 272-1516. The examiner can normally be reached on Mon. - Fri. 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on (571) 272-6708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Fadey S Jabr
Examiner
Art Unit 3639

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SUPERVISORY PATENT EXAMINER